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A Visit to the Flamingos in the Great Rann of Kutch

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(With three plates)

On 16 April 1960 the three of us and P. W. Soman of the Bombay Natural History Society assembled in the Modern Hotel at Bhuj. 'A sight for the Gods' Dr. Sálim Ali had written to us describing Flamingo City which he had visited on 21 March 1960 from the birdringing camp at Kuar Bet and, excited by what he said, we were about to set off hoping to share in the pleasure and to seize the privileged opportunity of witnessing the spectacle. However there was deep down amidst all the enthusiasm, a mild doubt which was ever so lightly perceptible in all our minds. Had not McCann said that the Rann dries up pretty fast when it does start doing so? He had found that the water receded many miles each day, forcing the breeding flamingos to evacuate their nests, some even containing hard-set eggs and newly hatched young, while countless chicks in the running stage fall out by the wayside unable to keep up with the rapidly retreating waters and lie as mute testimony to the disasters which strike breeding populations in nature. Suppose, we asked each other, that such a catastrophe had happened? Would we merely be witnesses to one of Nature's cruel acts of profligacy? Another alternative, the voice of doubt softly whispered: 'What if the birds have hatched out their eggs and taken their broods into deeper water?'

However, these unpleasant thoughts were not allowed to choke our enthusiasm, for the bus seats for Khavda had to be reserved for the next morning, essential stores had to be purchased, and as a couple of us discovered that we lacked sunglasses to protect our eyes against the glare of the Rann we had to set about acquiring these. We therefore spent a busy afternoon in the picturesque and tortuous bazaars of Bhuj behind the thick medieval walls.

17 April 1960. The following morning we left for Khavda. bus, a new one, was not over-crowded as most State Transport buses are. We had front seats, and the morning was pleasantly cool with a fresh breeze coming from the north. We travelled fast and soon the sandstone hills of Kutch were left behind, and the level country of the Banni's edge began. At first there were dense shrubberies of Salvadora and tamarisk which later thinned out and gave way to the flat featureless expanse of the true Banni. The Grey Partridge was plentiful and scuttled into cover. Common Babblers chattered among the shrubberies, and chattering flocks of Rosy Pastors migrat-Redvented Bulbuls were common ing northward flew overhead. and White-eared Bulbuls were seen in increasing numbers. latter seem to be very partial to Salvadora, and it is worthy of note that in near-by Saurashtra this pretty little bulbul is totally absent from large tracts of the interior, and is found chiefly around the coastal flats where the Salvadora also appears. Can it be merely a coincidence that the requirements of the bird and the plant are similar, or does the plant have an ecological influence on the bird?¹

The Banni itself is a flat featureless expanse, a limitless plain of blue-green vegetation. The plants are short bushes with highly xerophytic characters; their fleshy leaves store large amounts of water, and are avidly cropped by camels. The Banni is a remarkable phenomenon; the plain lies but a few feet above sea-level, and is so lacking in gradient that the rain-water lies in a shallow sheet over it slowly draining into the sea, or just evaporating into the dry air. The disappearance of the water is followed by a parching dessication during the hot season, and the soil is encrusted by salt; tall dust devils race across the expanses and mirages shimmer, tantalising and cool, in every direction. This is stock-rearing country, famous for its fine herds of large-horned cattle and camels.

For the first time the large Franklin's Crested Lark appeared, several female Pale Harriers and a Marsh Harrier went gliding north, hunting as they went. We were all on the look-out for the

¹ This association has been noted near Bombay also. See J. Bombay nat. Hist. Soc. 39: 101.—Eps.

splendid Desert Larks but saw none; instead, we saw a few Redwinged Bush Larks in patches of grass and *Prosopis*, and isolated pairs of Ashycrowned Finch Larks feeding beside the road. Some of the trenches on both sides of the road still contained watery mud choked with frogs and provided ample sustenance to flocks of Lesser Egrets, Small Egrets, Pond Herons, and solitary Large Egrets.

In the centre of the Banni is an extensive oasis of large shady Acacias casting deep pools of shade, cool and restful after the sundrenched Banni. The grass was refreshingly green. Large herds of cattle and buffaloes stood around under the trees, attended by Cattle Egrets. The inhabitants are Jhads, a cattle-herding tribe. They are well-built people and, though they are Muslims, their women go around unveiled and appear to enjoy a status equal to the men.

Leaving Brindiala, as this oasis is called, and proceeding again into the dazzling brightness of the Banni, we passed a couple of small herds of Chinkara, which do not seem to be at all as plentiful as claimed; nor did we come across any Black Buck or other game, big or small. Undoubtedly the Banni no longer enjoys its former status of a small game paradise, and is certainly not behind the times in this respect compared with the rest of India; man's predation is greater and more effective than is believed outside Kutch.

The commonest animal of the Banni was the Spinytailed Lizard, Uromastix hardwicki, sunning itself on the baked sand. Its performance of suddenly vanishing after a short spurt was intriguing until one realised that the disappearing trick was done down its burrow. These lizards are undoubtedly the chief provender of the large numbers of passing birds of prey during the autumn and spring migrations. Certain nomadic tribes of the area consider that this lizard's flesh has strong aphrodisiac properties and regard it as a valuable delicacy. . . . And so in time for an early lunch in Khayda.

At Khavda, arrangements had been made for our stay at the police chowky. It was in a way like a home-coming, as we had been here in the summer of 1956, unsuccessfully on a similar errand, and were then as now hospitably accommodated by the local officials. Things had changed little in the intervening years and, except for a block of new orderly quarters in the large enclosure, everything was as it had been then—time might well have stood still for the period. As some high dignitaries were on a routine inspection, we saw little of the officials who had been making arrangements for guides and baggage animals to take us to Nir. The chief guide Jamal Nathu was nowhere in town, and there was no news of him. 'He might

arrive this evening', they all said. Camels were also not available for hire readily. It was very depressing and it seemed that after all we were stranded. The doy all of a sudden lost its charm, and we dejectedly prepared for lunch and then to await developments in the afternoon. Just then someone said Jamal had arrived and sure enough there he was standing in the doorway, a thin dark man dressed in the manner of his people. Spirits revived and lunch was forsaken to get all information out of him. He was optimistic, as there was still plenty of water in the Rann, and large numbers of flamingos fed along its edges. They had no young with them, and so it was obvious that the birds were still at the colony site and had not moved off; the camels and ponies had also arrived and were grazing on the turf of the village tank, so we could leave for Nir the first thing next morning. The well-cooked lunch, a tribute to the long catering arm of the Modern Hotel, and a short siesta were followed by an afternoon of baggage sorting. In the cool of the evening we went for a stroll to see our pack animals, and to record what birds were around. In addition to the usual birds one sees around any village tank in Kutch, we saw a Wryneck, a little Green Heron, and a pair of Laggar Falcons.

18 April 1960. The sturdiest camel was loaded with all the baggage, three others and two ponies were to be used for riding. At 7.50 a.m. the cavalcade started across Pachham towards the northwest end of the Island where the spurs of Kala Dongar subside into soft undulations and finally give way to the flat expanse of the Rann. The entire way is well covered by scrub, and there is little cultivation. Cattle-rearing is the chief occupation, and there are signs of considerable overgrazing. The little cultivation done is of a perfunctory nature and depends entirely on the vagaries of the monsoon Much of the land is deeply eroded. The thickets however were well populated by Grey Partridge, Rain Quail, Purple Sunbirds, Redvented Bulbuls, White-eared Bulbuls, Rufousfronted Wren-Warblers, Franklin's Wren-Warblers, Common Babblers, Tailor Birds, Common Mynas, Brahminy Mynas, Redwinged Bush Larks, Ring and Little Brown Doves, and Roseringed Parakeets. Common Sandgrouse were noted flighting in pairs and small parties. The heavens overhead were quartered by King Vultures, Whitebacked Vultures, Longbilled Vultures, and white Scavenger Vultures accompanied by a few Griffons. Tawny Eagles were also seen soaring in loose pairs, while in the shady Banyan over the well at Wadvala, known as Wad-vali Way, a pair of Redheaded Merlin had three young in the nest. A pair of Laggar Falcons and a Peregrine were also recorded. At Kakrao where we spent the heat of the day under a densely shaded small tree, we heard and later saw a Raven. It was there on our return.

From Kakrao we rode north. After descending the last low ridge we came to the Rann, and then turned east along its edge. On our right the great escarpment of Kala Dongar rose steeply—great beetling crags covered by thick tangled scrub and grass, still showing green. Birds were plentiful, and their songs were carried in a disembodied symphony from high overhead. Indian Robins were very plentiful with Baybacked Shrikes (many in juvenile plumage) and pairs of Brown Rock Chats.

Where the slopes eased to form narrow flat areas between the perpendicular of the Kala Dongar and the horizontal of the Rann, the subsoil water was sweet, and herds of cattle were pastured, their tingling bells bringing to mind the high pastures of the Himalayas.

On our left stretched the Rann—startlingly flat and immense; first a white encrustment of salt shining in the sun, then wet mud dark brown and rich, and beyond this the blue water, rivalling the sky overhead and stretching to the horizon where it shimmered into the sky, and it was difficult to discern where one ended and the other began. Here was a region where desert and water had become one in essence, vast and limitless, a land of silence, ruled by the wind and the sun, a home of dancing mirages, a region forbidding vet fascinating in the starkness of its elemental harshness. Yet it was awe-inspiring to see on this cruel stage life playing its part in the great flocks of pink flamingos feeding in the shallows, flying in skeins low over the water or writhing high above the mirages and merging into their unreality like ethereal beings, frail phantoms epitomising life, fragile yet all-conquering. A little further we came across packed flocks of Blackwinged Stilts, Stints, Ruffs and Reeves, Marsh Sandpipers, Whimbrel, Sand Plovers, and some Blacktailed Godwits. Gullbilled Terns, Blackheaded Gulls, and Brownheaded Gulls flew buoyantly over the water. Tired but happy, we rode along slowly, drinking in the sights of this improbable land. Here was grandeur and beauty rivalled by few other creations of Nature.

We made Nir late in the evening as the setting sun cast a warm glow on the wonderful landscape. The mirages subsided and far out on the northern horizon we saw lines of pink and white, which Jamal said were Flamingo City. The birds were still breeding. A memorable day had ended well, and tired and happy we lay under the brilliant stars, worn out but contented.

19 April 1960. The pink light of dawn rekindled the scene. In the

direction of Flamingo City masses of pink would blaze up and resolve into long undulating lines of flamingos flying south to the water off Kunaria or to the west to feed on the edges of the Rann where we had already seen the vast flocks on our way to Nir.

With thrilled anticipation we broke camp, loaded the animals and after watering them, set off for the colony. The direction was northeast of Nir, and traversing a dense stand of tall Calotropis sp. alive with sunbirds and bulbuls, skirting a green pool of fresh water over which hovered and wheeled terns and gulls, we came to the edge of the Rann and, crossing a short expanse of wet and slippery mud in crossing which the camels fared ignominiously, we entered the water. Throughout the whole distance, some seven miles in a straight line, the water was from a few inches to a foot and a half deep, clear, and with a few shoals of varieties of small fish many of which were dead, floating belly upwards, and well preserved in the concentrated brine.

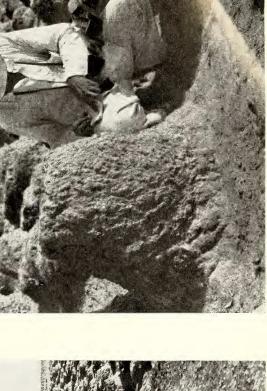
Flamingos fed singly and in small groups in all directions, while lines of birds flew by in wavering ribbons between the blue sky and the blue water sparkling in the morning light. Flocks of Gullbilled Terns and Blackheaded Gulls flew around and over us. Tight flocks of Marsh Sandpipers fed busily in the shallows and large numbers of Ruffs and Reeves, Redshanks, Sand Plovers, and Stints flew fast and low towards the north. A small group of Whitewinged Black Terns also went over.

The camels, so sure-footed and aloof on dry land, were in a hopeless condition, floundering in the wet mud; in water they fared slightly better but their pace was agonisingly slow. On several occasions they almost landed the riders and the baggage in the water. Had such an unfortunate accident occurred, the entire expedition would have been in a pretty mess indeed. The horses soon outstripped the camels and were lost in the distant haze, leaving a long black trail in the water and mud for the cumbersome 'ships of the desert' to follow as best as they could. For the horsemen the ride was a pleasant experience as they watched the birds and moved with safety and speed across the watery miles, but for those on camels the morning soon lost its sparkle and, as the haze and mirages shortened the horizons around them, the heat of the sun overhead and the glare of the water below induced a state of torpor, livened only by occasional clouds of pink as flamingos far beyond the curtain of mirages rose before the horses, or a numbed limb shot a complaint through the already strained spine. The hours slipped by, and yet we seemed to be in the same place, as in a dream. It was as if we

Flamingo colony in Rann of Kutch

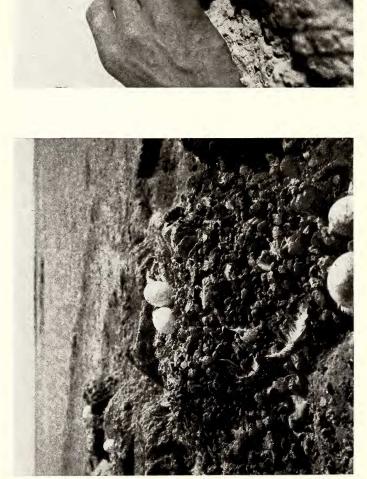


A large mound in the main colony



Photos: Authors

'Nests and nests for hundreds of yards'



Photos: Authors

Flamingo nests of mud pellets with 2 eggs



Newly hatched Flamingo chick

had become one with timeless space, and everything had reached a standstill in eternity. It was therefore with some effort that it dawned on us that we had arrived. In the distance could be seen ranks of white birds. A clump of black forms making their way grotesquely across some dry sand turned out to be pelican fledglings in their black down, and the larger forms were the ponies and the rest of the party. It was all still unreal, as we came on to dry saltencrusted sand. Getting off the camels, we walked the rest of the distance to ease our cramped legs. The sight of the flamingos was beyond belief. The fabulous birds were atop their mound-like nests, some standing and others sitting, their graceful necks curved over their backs. Every now and then, heads would rise high and pink wings would open and flash in display and the soft murmuring from the tending birds rose incessantly like distant surf on rocks. Behind the peaceful congregation of sitting birds there were in the water, now several hundred yards from the colony, rank upon rank of birds feeding with young in tightly packed rafts among their feet—a sight indeed worthy of the gods! There we sat in the blazing sun with the amazing spectacle spread before us. Years of longing had at last come true and, in a dreamlike comprehension, we scanned the great expanses of baked mud, the clustered mounds of mud nests rising from them, and the graceful pink forms poised above.

At long last we bestirred ourselves, pitched the tent for shelter from the sun, and assembled the photographic hide, and then we lay down for the afternoon. The birds were content on their nests, while files of incoming birds were met by outgoing birds, and ripples of fire would spread and subside as birds rose, stretched their wings, and settled down again. We flattered ourselves as about to achieve a long cherished hope. The birds were there, albeit fewer than those seen by the earlier party, but their numbers were still in the thousands, and above all they were ridiculously tame, or so they seemed, and took not the least interest in our tent and ourselves, though we loomed conspicuous on the flat and limitless Rann. Before sundown that day, things were to turn out differently, and a well-planned expedition was to fail on account of over-familiarity induced by the birds' own tameness. This showed us forcefully how no chances can be taken when working with wild creatures.

At 2.00 p.m. some 200 Rosy Pelicans appeared overhead. They circled around, at first high and then, in successive spirals, lower and lower, providing a magnificent display as in formation they gracefully rode the air currents revealing a mastery over the art of flight. In this manner they soared effortlessly for a couple of hours, and it

was obvious that they had not taken kindly to our presence so close to their nesting ground. They finally departed, flying south from whence they had come. A few of them however circled round and landed to the north in the water. Their gawky black chicks were all in a huddle among the old flamingo nests on the southern side of the 'City', sheltering as best they could from the fierce heat of noon. Soon after, the baggage men and animals left us to our lonely vigil in the boundless spaces with the wind and the birds.

. When the sun dropped to the western horizon and the heat abated, we went on our various tasks of examining the deserted section of the colony, looking over the pelican nests in which there were still many nests intact with feather lining and two eggs, deserted by the parents when the major breeding was over, and trying to capture some newly hatched flamingos for their vomit for analysis by the Society. The capturing of the young flamingos was ill-advised and should have been attempted on the very last day, as this greatly disturbed the sitting birds and they now coupled us and our manifestations with predators. The tent and all movement, which till now had caused them no concern, were now suspect. They became suspicious and it was clear that there would be a risk in attempting close range photography near the colony and, so as not to disturb the birds any further, all operations in the vicinity of the colony were stopped. The fact that the majority of the birds had left with their chicks and made for the water, which had receded from the site, must have greatly weakened the attachment of these late breeders, and any intrusion now would surely snap the slender thread of emotion holding the dwindling group of breeders together and cause them to desert. Unhappily we called it a day and decided to move our camp the next morning and watch the birds from afar. The counting of the occupied nests was to be done just prior to our departure; photography and data collection was not to be done, for fear of frightening the birds.

20 April 1960. Before sunrise the camp was shifted to the far end of the mudflat about 2000 paces from the colony. It was a backbreaking task. Under canvas, we prepared to pass the day watching and observing whatever little we could from the distance. rapidly mounted in the heavens; the heat was intense, and the mirages sprang up around us obscuring the flamingos and their colony from view. Some Desert Larks arrived to hunt for insects among the cracks in the mud, and then flew off. Lost amidst the unusual surroundings, a Ring Dove alighted for a short while, while a Wryneck

pretended that bits of driftwood were tree-trunks. A male Blueheaded Wagtail also paid a short visit. Flocks of Ruffs and Reeves hurtled past, and isolated groups of Stints twittered by. At noon Jamal arrived on his white pony with fresh water and curds. We had lunch off tinned fruits, and lay back as the formations of pelicans came soaring over from the south. They finally settled among the deserted flamingo nests close to their chicks, who came over to be fed; the actual process could not be seen clearly on account of the mirages. After Jamal departed for Nir we strolled across to the northern edge of the mud flat to watch the great masses of feeding birds with their chicks. Great masses of flamingos stretched along the horizon half a mile out in the water, with tightly packed clusters of dark chicks among their feet. These were in all stages of development from very small white-downed birds to brown-feathered birds several months old. The birds extended across 40° of horizon. We were thrilled to see a flock of 77 Lesser Flamingos in vivid plumage. They later flew off into the setting sun. Lines of the larger birds flew to and fro, going to and coming from the distant feeding grounds in an unending cavalcade. The sound made by the feeding birds was a constant roar like that of distant waves. evening was a gorgeous one. At sundown, the pelicans were still with their young, clouds of midges flew over the tent, and in the deepening dusk flamingos passed low above us to the colony like the ephemeral forms of apasaras.

21 April 1960. The pelicans had spent the night with their young, many of which had been led away into the water to the north. Soon after dawn the adults left. We all went over to the colony to count the occupied nests and to do what little was possible for the cause of science. This had to be done as rapidly as possible so as not to disturb the birds for too long. No catching of young was to be done. Very soon we were back in camp, making ready to leave immediately the camels arrived.

The transport arrived at noon and they fetched with them an ever-welcome refreshment of curds. Two of us took the ponies and rode out into the water to have a closer look at the feeding adults and their chicks. The huge population of flamingos was amazing and the young were conservatively estimated at not less than half a million. Undoubtedly, this year's breeding has been the most successful ever. The abundance of water in the Rann so late in summer augurs well for the hordes of young reaching maturity.

Late that night we arrived at Nir. A strong westerly wind had driven the water away from large parts of the track but Jamal assured

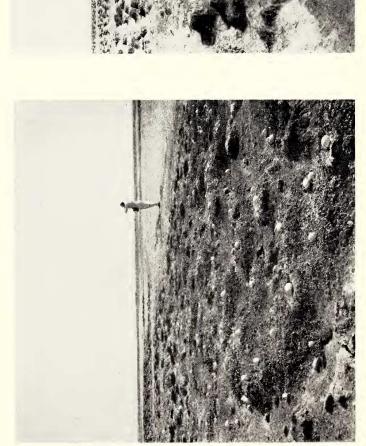
us that as there was ample water on the east of Pachham there was no possibility of the birds being left dry even if the wind were to persist for several days. Thus ended a memorable experience, and despite the failure of our primary purpose of photographing the birds at close range, great experience had been gained. Notwithstanding the severe physical hardships endured, the next season's visit is looked forward to with keenness.

OBSERVATIONS

Only a portion of the breeding flamingos, reported by Dr. Sálim Ali [J. Bombay nat. Hist. Soc. 57 (2): 412-4] were still on the nest site. Approximately 2000 nests were still occupied. The water had receded a couple of hundred yards from the colony. The majority of the tenanted nests had obviously been constructed after the water had receded and were very low and composed of flaked pieces of mud, whereas the older nests were all tall and well-constructed or well-fashioned, and were made of smooth plastered mud. These nests were however built on the remains of the older nests, whereas some of the nests in occupation were of the taller type and suggested that they had been built earlier and must have been used twice and even thrice in the same season. It naturally is not possible to say whether the same pair were rearing supplementary broods, or whether newcomers had taken over after the original owner had vacated.

Six separate groups of nests were in habitation, but even the largest group was very insignificant beside the now vacated colonies. The largest occupied colony had an area of 1436 sq. yards, whereas the smallest was 30 sq. yards in area. In the largest colony still in use, a sample count yielded 3300 nests, of which only 1600 contained eggs, and there were 9000 eggs lying outside in heaps or smashed. Large quantities of eggs lay half buried in the mud and were not included in the count. This shows an enormous wastage of eggs, either accidentally rolled off the nests by the parents, or rolled off by predatory Neophrons. In another colony of 300 nests 30 were occupied and there were 340 eggs on the ground. However, it should be noted that the number of eggs on the ground was much less in other colonies, and in the large colonies which were unoccupied at the time of our visit the number of eggs on the ground was very much lower and even insignificant. Of course, Neophrons may have destroyed and eaten up many of these eggs in the unoccupied colonies.

The clutch was usually of one egg, though several nests contained



The largest occupied Flamingo colony. Note eggs on ground and low nests of mud flakes on remnants of older nests



Rosy Pelican eggs and nests on border of Flamingo colony

Photos: Authors

